

Work Order ID 132943

132943

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Wednesday, May 20, 2015 11:27:54 AM

Item ID: D4804-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: 407 Bipod Assembly
 Start Date: 5/20/2015 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 5/20/2015 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: MAY 20 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4804	C

110		0.00				2	FF	JUN 16 2015
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110

Small Fab

Small Fab

Memo

ALIGN PILOT HOLES IN D4807-041 WITH PILOT HOLES IN D4804-1.
 ALIGN PILOT HOLES IN D4808-041 WITH PILOT HOLES IN D4804-1.
 DRILL OUT EACH HOLES USING A PILOTED DRILL AS PER DWG.
 REAM EACH HOLES USING REAMER, USING DART TOOL SETUP
 DT9954 AS PER DWG.

120	QC5- Inspect part completeness to step on W/O	0.00				(2)		DAS 38 9-89 JUN 17 2015
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120

QC

Quality Control

Memo

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Part No. _____		Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐	
		Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐	
NCR No. _____		Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐	
		Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		☐	
Date :	Step #:	QTY Effective :							MRB (QS1042) Approval			
Description Work Order Deviation				Disposition								
												Completed By
												Lead hand / Supervisor Approval Verification
												QC / QA Coordinator Approval
Root Cause				FAULT CATEGORY								
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐	
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐	
Past Expiry Date	☐	Manufacturing Process	☐									
Misidentified	☐	Past Due	☐	OTHER :								

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Approvals: Process Plan: -- Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130						2	FF		JUN 17 2015
Small Fab	Memo	0.00							
Small Fab	INSTALL PIN/COLLAR AND END FITTING WITH HYSOL WHILE STILL WET AS PER DWG USE DT9954 A/R HYSOL BATCH: <u>M131581</u>								
140	QC5- Inspect part completeness to step on W/O	0.00							
140						(2)			DAS 38 9-89 JUN 17 2015
QC	Memo	0.00							
Quality Control									
150	Outsource process - Laser Marking	0.00							
150						CL			JUL 03 2015
Outsource9	Memo	0.00							2
Outsource process - Laser Marking	ISSUE P/O : <u>29025</u> OUTSOURCE VENDOR: P&L PRINTING ENGRAVE P# AS PER DWG C OF C IS REQUIRED								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC5- Inspect part completeness to step on W/O	0.00							
170									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location: ST236	0.00							
180									
Packaging	Memo	0.00							
Packaging									

2x 8015-07-15

② 15-07-15 DAS 9 9-89

② JUL 20 2015 JA DAS 6 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

ML5 JUL 20 2015

May 21/20/15
DIS-7-20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

*Picklist Print

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Work Order ID: 132943

132943

Parent Item: D4804-041

D4804-041

Parent Item Name: 407 Bipod Assembly

Start Date: 5/20/2015

Required Date: 5/20/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 14.01.16 NEW ISSUE DD VERF:JLM IPP
REV:B 14.07.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4804-1		Manufactured	No				Each	21.0000		4			
D4804-1									**		FF	JUN 16 2015	
Strut													

Location	Loc Qty	Loc Code
st128	21	
121480	10	
127413	2	
129783	9	

D4807-041		Manufactured	No				Each	19.0000		2			
D4807-041									**		FF	JUN 16 2015	
Support Assembly													

Location	Loc Qty	Loc Code
ST129	19	
116515	2	
121569	6	
121570	3	
122320	5	
123237	3	

D4808-041		Manufactured	No				Each	24.0000		4			
D4808-041									**		FF	JUN 16 2015	
Rod End Bearing Assembly													

Location	Loc Qty	Loc Code
ST130	24	
121624	6	
123084	12	
123486	6	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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OTHER :																																																																				

Picklist Print

Page 2

Wednesday, May 20, 2015 11:27:58 AM

Work Order ID: 132943

132943

Parent Item: D4804-041

D4804-041

Parent Item Name: 407 Bipod Assembly

Start Date: 5/20/2015

Required Date: 5/20/2015

Start Qty: 2.00

Required Qty: 2.00

HL32PB5-8

Purchased

No

Each

373.0000

16

HI 32PB5-8

FF JUN 16 2015

Hi-Lok Pin

Location

Loc Qty

Loc Code

ST553

373

m129803

21

m129865

352

16

HL86-5

Purchased

No

Each

871.0000

16

HI 86-5

FF JUN 16 2015

Collar

Location

Loc Qty

Loc Code

ST553

871

M128228

3

M129022

200

M129864

668

16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																											
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			QC / QA Coordinator Approval																																																																												
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29025**

Purchase Order Date 7/3/2015

PO Print Date 7/3/2015

Page Number 1 of 2

Order From :

VC-PL001

Ship To : DART AEROSPACE LTD

P & L PRINTING
19226 AIRPORT ROAD
SUMMERSTOWN, ONTARIO K0C 2E0
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID

Contact Name

Vendor Phone 613-931-1241

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	117216 LASER MARKED	D4801-041 AFT LEG ASSEMBLY	7/10/2015 Yes 7/10/2015		1.00 ✓	\$4.00	\$4.00
Line Total:							\$4.00
2	132943 LASER MARKED	D4804-041 BIPOD ASSEMBLY	7/10/2015 Yes 7/10/2015		2.00 ✓	\$4.00	\$8.00
Line Total:							\$8.00
3	132944 LASER MARKED	D4834-041 MID LEG ASSEMBLY	7/10/2015 Yes 7/10/2015		2.00 ✓	\$4.00	\$8.00

Note:

7/3/2015

2.00 ✓

SP 15-07-15

SP 15-07-15



19226 Airport Road
Summerstown, ON
K0C 2E0 Canada

Tel. 613-931-1241
Fax 613-931-2560
plprinting@bellnet.ca

PACKING SLIP

SOLD TO

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

SHIPPED TO

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

DATE July 13, 2015

P.O NUMBER PO29025

ITEM DESCRIPTION	QUANTITY	COMMENTS
D4801-041 LEG ASSEMBLY	1	ALL ITEMS HAVE BEEN LASER MARKED
D4804-041 LEG ASSEMBLY ✓	2	
D4834-041 LEG ASSEMBLY	2	
D4866-041 LEG ASSEMBLY	3	

SP15-07-15



19226 Airport Road
Summerstown, ON
K0C 2E0 Canada

Tel. 613-931-1241
Fax 613-931-2560
plprinting@bellnet.ca

Invoice

Number: 7876

Date: July 13, 2015

Bill To:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

Ship To:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

PO Number	Terms	Ship Via
29025		

Description	Quantity	Price	HST	Amount
Laser Metal Marking, D4801-041	1.00	4.00	✓	4.00
Laser Metal Marking, D4804-041 ✓	2.00	4.00	✓	8.00
Laser Metal Marking, D4834-041	2.00	4.00	✓	8.00
Laser Metal Marking, D4866-041	3.00	4.00	✓	12.00
<i>7876-07-15</i>				
Sub-Total				\$32.00
13.00% on 32.00				4.16
Total				\$36.16

Whatever we make, we make it the best we possibly can.
We make it as good as if we were going to keep it for ourselves.

H.S.T. No. 13301 4258

2% INTEREST CHARGED ON OVERDUE ACCOUNTS
PAY BY INVOICE NO STATEMENT WILL BE ISSUED

Thank You